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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/505,417

08/24/2004

Hiroshi Kaneta

8017-1141

7384

466

7590

07/23/2010

YOUNG & THOMPSON

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EXAMINER

LEE, CYNTHIA K

ART UNIT

PAPER NUMBER

1795

NOTIFICATION DATE

DELIVERY MODE

07/23/2010

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

DocketingDept@young-thompson.com

Office Action Summary	Application No. 10/505,417	Applicant(s) KANETA ET AL.	
	Examiner CYNTHIA LEE	Art Unit 1795	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 May 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 23-39 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 23-39 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 5/25/2010 has been entered.

Response to Amendment

This Office Action is responsive to the amendment filed on 5/25/2010. Claims 1-22 have been canceled and claims 23-39 have been added. Claims 23-39 are pending. Applicant's arguments have been considered and are persuasive. However, upon further consideration, the instant claims are rejected under new grounds of rejections. Claims 23-39 are non-finally rejected for reasons stated herein below.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 23-25, 27-29, 32-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamashita (US 6287720) in view of Yoshida (US 6040086).

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Yamashita discloses a flat secondary battery comprising: an electric-power generating element provided with positive 11a and negative 12a electrode collectors.

Regarding claims 27, 32, 33, electric-power generating element is made up of anode elements 12b and cathode elements 11b alternately stacked with a separator 13A sandwiched between each anode element and each cathode element. See fig. 2.

Regarding claims 28 and 36, the battery is provided with a casing of a laminate film (10:25).

Regarding claim 29, Yamashita discloses a battery but does not disclose a plurality of said battery connected serially to each other. However, the Examiner notes that it is common practice in the art to connect a plurality of batteries either in series or parallel to increase the voltage or the current depending on the power requirements of the intended application of the battery. It would have been obvious to one of ordinary skill in the art at the time the invention was made to connect the battery of Yamashita in series or parallel for the benefit of meeting the power requirements of the intended application.

Regarding claim 23, Yamashita does not disclose each of said collectors having a respective uncoated area that is free of active material; positive and negative electrode terminals for charge and discharge and that are attached to said uncoated areas of said positive and negative electrode collectors, respectively; and a third terminal that is attached directly to said uncoated area of one of said positive and negative electrode collectors and that does not directly contact either of said positive and negative electrode terminals, wherein said third terminal and a respective one of

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said positive and negative electrode terminals are attached to said uncoated area of said one of said positive and negative electrode collectors at different positions in order to avoid an influence on said third terminal of heat from the respective one of said positive and negative electrode terminals, and wherein said third terminal has a same electric potential as said respective one of said positive and negative electrode terminals and said third terminal is attached electrically conductively to said uncoated area of said one of said positive and negative electrode collectors. Yoshida teaches a current-collecting arrangement in a power-generating element has been accomplished by connecting a plurality of terminals 2 to an electrode plate at an uncoated portion 4 on a longitudinal side edge thereof (multi-terminal collector system) to obtain high discharge-rate ability (1:30-40). See fig. 2. It would have been obvious to one of ordinary skill in the art at the time the invention was made to add multiple terminals to the current collectors of Yamashita, as taught by Yoshida, for the benefit of obtaining high rate discharge ability.

Regarding claims 24, 25, 33, it is noted that forming multiple terminals to extend in different directions would have been within the skill of an ordinary artisan, absent persuasive that the configuration is significant.

Regarding claims 35 and 36, the terminals would be attached to said one of said positive and negative electrode collectors inside said casing because the casing would enclose the battery current collectors.

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Claims 26, 30, 31, 38, 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamashita (US 6287720) in view of Yoshida (US 6040086) as applied to claims 23, 24, or 37, further in view of Higashima (US 5886502).

Yamashita modified by Yoshida does not disclose a third terminal connected to a control circuit. Higashijima discloses a cell balancer circuit connected to cells connected in series to detect difference in voltage among the cells. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to add a cell balancer circuit to the cell terminals for the benefit of detecting the voltage of the cells and achieving a balance of voltages among the cells, as taught by Higashijima (abstract, 1:5-10, 2:40-45).

Regarding claim 39, Yamashita discloses a battery but does not disclose a plurality of said battery connected serially to each other. However, the Examiner notes that it is common practice in the art to connect a plurality of batteries either in series or parallel to increase the voltage or the current depending on the power requirements of the intended application of the battery. It would have been obvious to one of ordinary skill in the art at the time the invention was made to connect the battery of Yamashita in series or parallel for the benefit of meeting the power requirements of the intended application.

Response to Arguments

The Declaration dated 5/25/2010 has been found persuasive. Applicant's arguments filed 5/25/2010 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cynthia Lee whose telephone number is 571-272-8699. The examiner can normally be reached on Monday-Friday 8:30am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Ryan can be reached on 571-272-1292. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Cynthia Lee/
Examiner, Art Unit 1795